

GenCore version 5.1.7  
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OM protein - protein search, using sw model

Run on: March 6, 2006, 14:43:28 ; Search time 48 Seconds  
(without alignments)  
1278.028 Million cell updates/sec

Title: US-10-090-215-12

Perfect score: 3858  
Sequence: 1 MADSEGPAGGEVAELPG.....GOVSXSHKWLQSGRRRL 742

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued Patents AA.\*

- 1: /cgn2\_6/prodata/1/iaa/5\_COMB.pep.\*
- 2: /cgn2\_6/prodata/1/iaa/6\_COMB.pep.\*
- 3: /cgn2\_6/prodata/1/iaa/H\_COMB.pep.\*
- 4: /cgn2\_6/prodata/1/iaa/PCUS\_COMB.pep.\*
- 5: /cgn2\_6/prodata/1/iaa/RG\_COMB.pep.\*
- 6: /cgn2\_6/prodata/1/iaa/backfiles1.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	3858	100.0	742	2	US-09-500-123-12
2	3823	99.1	871	2	US-09-500-123-7
3	3470	89.9	811	2	US-09-500-123-9
4	1604.5	41.6	843	2	US-09-235-451-25
5	1604.5	41.6	843	2	US-09-235-451-25
6	1579.5	40.9	838	2	US-09-235-451-2
7	1579.5	40.9	838	2	US-09-132-316-3
8	1579.5	40.9	838	2	US-09-667-422-9
9	1579.5	40.9	838	2	US-09-978-303-2
10	1579.5	40.9	838	2	US-10-246-435-9
11	1579.5	40.9	838	2	US-10-137-316-3
12	1557.5	40.4	839	2	US-09-197-636-2
13	1556.5	40.3	839	2	US-09-197-636-8
14	1556.5	40.3	839	2	US-09-235-451-34
15	1556.5	40.3	839	2	US-09-978-303-34
16	1555.5	40.3	839	2	US-09-533-220A-2
17	1555.5	40.3	839	2	US-09-949-016-6937
18	1555.5	40.3	839	2	US-10-128-853-2
19	1552.5	40.2	839	2	US-09-197-636-4
20	1551.5	40.2	839	2	US-09-667-422-4
21	1551.5	40.2	839	2	US-10-246-435-4
22	1375	35.6	798	2	US-09-949-016-9926
23	1324	34.3	761	2	US-09-235-451-4
24	1324	34.3	761	2	US-09-978-303-4
25	1306	33.9	889	2	US-09-132-316-2
26	1306	33.9	889	2	US-10-137-316-2
27	1298.5	33.7	764	2	US-09-235-451-36

28	1298.5	33.7	764	2	US-09-978-303-36	Sequence 36, Appl
29	1071	27.8	511	2	US-09-667-422-5	Sequence 5, Appl
30	1071	27.8	511	2	US-10-246-435-5	Sequence 5, Appl
31	777	20.1	727	2	US-09-235-451-23	Sequence 23, Appl
32	777	20.1	727	2	US-09-978-303-23	Sequence 23, Appl
33	733	19.0	727	2	US-09-350-457A-4	Sequence 4, Appl
34	724.5	18.8	725	2	US-09-350-457A-2	Sequence 2, Appl
35	548.5	14.2	279	2	US-09-149-476-500	Sequence 500, App
36	521	13.5	511	2	US-09-759-143-909	Sequence 909, App
37	521	13.5	511	2	US-10-012-896-909	Sequence 909, App
38	227	5.9	71	2	US-09-235-451-14	Sequence 14, Appl
39	227	5.9	71	2	US-09-978-303-14	Sequence 14, Appl
40	221.5	5.7	1709	2	US-09-392-812A-6	Sequence 6, Appl
41	216	5.6	1165	2	US-09-949-016-6874	Sequence 6874, Ap
42	215	5.6	1165	2	US-09-949-016-11392	Sequence 11392, A
43	213	5.5	134	2	US-09-759-143-910	Sequence 910, App
44	213	5.5	134	2	US-10-012-896-910	Sequence 910, App
45	210	5.4	1619	2	US-09-392-812A-4	Sequence 4, Appl

ALIGNMENTS

RESULT 1

US-09-500-123-12

; Sequence 12, Application US/09500123

; Patent No. 6455278

; GENERAL INFORMATION:

; APPLICANT: Dubin, Adrienne E

; APPLICANT: Huvar, Arne

; APPLICANT: Erlander, Mark G

; APPLICANT: Glasse, Charles A

; TITLE OF INVENTION: DNA encoding Isoforms of the human Vanilloid Receptor

; TITLE OF INVENTION: VR3

; FILE REFERENCE: Human VR3 receptors

; CURRENT APPLICATION NUMBER: US/09/500,123

; CURRENT FILING DATE: 2000-02-08

; NUMBER OF SEQ ID NOS: 17

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 12

; LENGTH: 742

; TYPE: PRT

; ORGANISM: Homo sapiens

; US-09-500-123-12

Query Match 100.0%; Score 3858; DB 2; Length 742;

Best Local Similarity 100.0%; Pred. No. 0;

Matches 742; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1	MADSEGPAGGEVAELPGDESGTGGGEAPLSSLANLFEDEGSLSPADASR	PAGP 60
Db	1	MADSEGPAGGEVAELPGDESGTGGGEAPLSSLANLFEDEGSLSPADASR	PAGP 60
Qy	61	GDGRNLRMKFGAERKGVNPIDILLESYESSVVPKAPMDSLFYGYRHHSSN	120
Db	61	GDGRNLRMKFGAERKGVNPIDILLESYESSVVPKAPMDSLFYGYRHHSSN	120
Qy	121	KHWKRIIEKQSPKAPAPQPPILKVNRPILFDIVSRGSTADLDGLLTHKKEL	180
Db	121	KHWKRIIEKQSPKAPAPQPPILKVNRPILFDIVSRGSTADLDGLLTHKKEL	180
Qy	181	TDEEFREPGTGKCLPKALLNLSNGRNDTIPVLLDIAERTGNRRFINSPFRDIYRGOT	240
Db	181	TDEEFREPGTGKCLPKALLNLSNGRNDTIPVLLDIAERTGNRRFINSPFRDIYRGOT	240
Qy	241	ALHIAIERCKHYVELLVAQADVHAQAGRFPPKDEGGYFYFGEPLPLSLA	CTNQPHI 300
Db	241	ALHIAIERCKHYVELLVAQADVHAQAGRFPPKDEGGYFYFGEPLPLSLA	CTNQPHI 300
Qy	301	VNYLTENPHKKADMRQDSRGNTVLHALVAIADNTRENTKFTVKMYD	LLLLLCARLFPDS 360
Db	301	VNYLTENPHKKADMRQDSRGNTVLHALVAIADNTRENTKFTVKMYD	LLLLLCARLFPDS 360

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QY 361 NLEAVLNNDGLSPLMMAAKTGKIGIFQHIIRREVTDDETRHLSRKFKOWAYGPVYSSLYD 420
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|
|
Db 361 NLEAVLNNDGLSPLMMAAKTGKIGIFQHIIRREVTDDETRHLSRKFKOWAYGPVYSSLYD 420
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|
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QY 421 LSSLDTCGEASVLEILVYNSKIENRHEMLAVEPINELLRDWRKFGAVSFYINVVSYLC 480
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|
|
Db 421 LSSLDTCGEASVLEILVYNSKIENRHEMLAVEPINELLRDWRKFGAVSFYINVVSYLC 480
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|
|
QY 481 AMVIFTLTAYOPLGTPPYRTTVDYLRAGEVITLFTGVLPFTTNIKDLFMKKCPGV 540
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|
|
Db 481 AMVIFTLTAYOPLGTPPYRTTVDYLRAGEVITLFTGVLPFTTNIKDLFMKKCPGV 540
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QY 541 NSLFDGSQLLYFYFVSVLVIYSAALYLAGIYAYLAVVMVFAVLVGMNALYFTRGKLKLTG 600
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|
|
Db 541 NSLFDGSQLLYFYFVSVLVIYSAALYLAGIYAYLAVVMVFAVLVGMNALYFTRGKLKLTG 600
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QY 601 TVSIMIQILFKDLFRFLVYLLFMIGYASALVSLNPNCAVMKVCNEDQTNCTVPTPSC 660
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Db 601 TVSIMIQILFKDLFRFLVYLLFMIGYASALVSLNPNCAVMKVCNEDQTNCTVPTPSC 660
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QY 661 RDSFTFSTFLDLFKLTIGMGDLEMLSSTKYPVVFIIILVTVIILTFVLLNMLIALMGE 720
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Db 661 RDSFTFSTFLDLFKLTIGMGDLEMLSSTKYPVVFIIILVTVIILTFVLLNMLIALMGE 720
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QY 721 TVGQVSKESKHIWKLQSGRRRL 742
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Db 721 TVGQVSKESKHIWKLQSGRRRL 742
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RESULT 2
US-09-500-123-7
; Sequence 7, Application US/09500123
; Patent No. 6455278
; GENERAL INFORMATION:
; APPLICANT: Dublin, Adrienne E
; APPLICANT: Huvar, Arne
; APPLICANT: Erlander, Mark G
; APPLICANT: Glass, Charles A
; TITLE OF INVENTION: DNA encoding isoforms of the human Vanilloid Receptor
; TITLE OF INVENTION: VR3
; FILE REFERENCE: Human VR3 receptors
; CURRENT APPLICATION NUMBER: US/09/500,123
; CURRENT FILING DATE: 2000-02-08
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 7
; LENGTH: 871
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-500-123-7

Query Match 99.1%; Score 3823; DB 2; Length 871;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 735; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MADSEGPAGGEGVAELPGDESGTGGGAFLSSLANLFEDEGSLSPADASRRPAGP 60
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Db 1 MADSEGPAGGEGVAELPGDESGTGGGAFLSSLANLFEDEGSLSPADASRRPAGP 60
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QY 61 GDGRPNLRMKFQGAFRKGVNPNIDLLSTLYESSVVPKAPMDSLFYGYTRHSSDN 120
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Db 61 GDGRPNLRMKFQGAFRKGVNPNIDLLSTLYESSVVPKAPMDSLFYGYTRHSSDN 120
|
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|
QY 121 KWRKKIIEKQSPKAPAPQPPILKVNRPILFDIVSRGSTADLDGLLPFLTHKKRL 180
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Db 121 KWRKKIIEKQSPKAPAPQPPILKVNRPILFDIVSRGSTADLDGLLPFLTHKKRL 180
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|
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QY 181 TDEEPREPSTGKTCPLKALLNLSNGNDTIPVLLDIAERTGNMRFINSPFDIYRGOT 240
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Db 181 TDEEPREPSTGKTCPLKALLNLSNGNDTIPVLLDIAERTGNMRFINSPFDIYRGOT 240
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QY 241 ALHIAIERCKHYVELLVAQADVHAQARGRFFQPKDEGGYFYFGELPLSLAACTNQPHI 300
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Db 241 ALHIAIERCKHYVELLVAQADVHAQARGRFFQPKDEGGYFYFGELPLSLAACTNQPHI 300
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QY 301 VNYLTENPHKKADMRQDSRGNTVHLVAIADTNTRENTKFTVYMYDILLKCARLFPDS 360
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Db 301 VNYLTENPHKKADMRQDSRGNTVHLVAIADTNTRENTKFTVYMYDILLKCARLFPDS 360
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QY 361 NLEAVLNNDGLSPLMMAAKTGKIGIFQHIIRREVTDDETRHLSRKFKOWAYGPVYSSLYD 420
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Db 361 NLEAVLNNDGLSPLMMAAKTGKIGIFQHIIRREVTDDETRHLSRKFKOWAYGPVYSSLYD 420
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QY 421 LSSLDTCGEASVLEILVYNSKIENRHEMLAVEPINELLRDWRKFGAVSFYINVVSYLC 480
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Db 421 LSSLDTCGEASVLEILVYNSKIENRHEMLAVEPINELLRDWRKFGAVSFYINVVSYLC 480
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QY 481 AMVIFTLTAYOPLGTPPYRTTVDYLRAGEVITLFTGVLPFTTNIKDLFMKKCPGV 540
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Db 481 AMVIFTLTAYOPLGTPPYRTTVDYLRAGEVITLFTGVLPFTTNIKDLFMKKCPGV 540
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QY 541 NSLFDGSQLLYFYFVSVLVIYSAALYLAGIYAYLAVVMVFAVLVGMNALYFTRGKLKLTG 600
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Db 541 NSLFDGSQLLYFYFVSVLVIYSAALYLAGIYAYLAVVMVFAVLVGMNALYFTRGKLKLTG 600
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|
QY 601 TVSIMIQILFKDLFRFLVYLLFMIGYASALVSLNPNCAVMKVCNEDQTNCTVPTPSC 660
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Db 601 TVSIMIQILFKDLFRFLVYLLFMIGYASALVSLNPNCAVMKVCNEDQTNCTVPTPSC 660
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QY 661 RDSFTFSTFLDLFKLTIGMGDLEMLSSTKYPVVFIIILVTVIILTFVLLNMLIALMGE 720
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Db 661 RDSFTFSTFLDLFKLTIGMGDLEMLSSTKYPVVFIIILVTVIILTFVLLNMLIALMGE 720
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QY 721 TVGQVSKESKHIWKLQ 736
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Db 721 TVGQVSKESKHIWKLQ 736
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RESULT 3
US-09-500-123-9
; Sequence 9, Application US/09500123
; Patent No. 6455278
; GENERAL INFORMATION:
; APPLICANT: Dublin, Adrienne E
; APPLICANT: Huvar, Arne
; APPLICANT: Erlander, Mark G
; APPLICANT: Glass, Charles A
; TITLE OF INVENTION: DNA encoding isoforms of the human Vanilloid Receptor
; TITLE OF INVENTION: VR3
; FILE REFERENCE: Human VR3 receptors
; CURRENT APPLICATION NUMBER: US/09/500,123
; CURRENT FILING DATE: 2000-02-08
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 9
; LENGTH: 811
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-500-123-9

Query Match 89.9%; Score 3470; DB 2; Length 811;
Best Local Similarity 91.7%; Pred. No. 0;
Matches 675; Conservative 0; Mismatches 1; Indels 60; Gaps 1;

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Db 1 MADSEGPAGGEGVAELPGDESGTGGGAFLSSLANLFEDEGSLSPADASRRPAGP 60
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|
|
QY 61 GDGRPNLRMKFQGAFRKGVNPNIDLLSTLYESSVVPKAPMDSLFYGYTRHSSDN 120
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Db 61 GDGRPNLRMKFQGAFRKGVNPNIDLLSTLYESSVVPKAPMDSLFYGYTRHSSDN 120
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QY 121 KWRKKIIEKQSPKAPAPQPPILKVNRPILFDIVSRGSTADLDGLLPFLTHKKRL 180
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Db 121 KWRKKIIEKQSPKAPAPQPPILKVNRPILFDIVSRGSTADLDGLLPFLTHKKRL 180
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QY 181 TDEEPREPSTGKTCPLKALLNLSNGRNDTIPVLLDIAERTGNMREFINPFRDIYRGQT 240
Db 181 TDEEPREPSTGKTCPLKALLNLSNGRNDTIPVLLDIAERTGNMREFINPFRDIYRGQT 240
QY 241 ALHIAIERCKKHVELLVAGADVHAQGRFPQKDEGGYFYFGLPLSLAACTNQHPI 300
Db 241 ALHIAIERCKKHVELLVAGADVHAQGRFPQKDEGGYFYFGLPLSLAACTNQHPI 300
QY 301 VNYLTENPHKADMRQDSRGNTVLAHALVAIAADNTRENTKFTVMYDLDLLKCARLPDPS 360
Db 301 VNYLTENPHKADMRQDSRGNTVLAHALVAIAADNTRENTKFTVMYDLDLLKCARLPDPS 360
QY 361 NLEAVLNNDGLSLPMAAATGKIGIFQHIIRREVTDETRHLSRKFQDMWAYGVPVSSLYD 420
Db 361 NLEAVLNNDGLSLPMAAATG----- 381
QY 421 LSSLDTCGEASVLEILVYNSKIENHEMLAVEPINELLRDKWRKFGAVSFYINNVSYLC 480
Db 421 LSSLDTCGEASVLEILVYNSKIENHEMLAVEPINELLRDKWRKFGAVSFYINNVSYLC 480
QY 481 AMVIFLTAYQPLEGTPPYRTVDYLRRLAGEVITLFTGVLFPTNFKDLFMKKCPGV 540
Db 421 AMVIFLTAYQPLEGTPPYRTVDYLRRLAGEVITLFTGVLFPTNFKDLFMKKCPGV 480
QY 541 NSLPIDGSQLLYFYISVLVIVSAALYLAGIEAYLAVMVFALVGMWNLALYFTRGLKLTG 600
Db 481 NSLPIDGSQLLYFYISVLVIVSAALYLAGIEAYLAVMVFALVGMWNLALYFTRGLKLTG 540
QY 601 TYSIMIQKLFKDLFRFLYLLFMIGYASALVSLNPNCKMVKCNEDQTNCTVTPYPS 660
Db 541 TYSIMIQKLFKDLFRFLYLLFMIGYASALVSLNPNCKMVKCNEDQTNCTVTPYPS 600
QY 661 ROSETFTFLDLFLKLTIGMDLEMLSSKYPVVFIIILVYIILTFVLLNMLIALMGE 720
Db 601 ROSETFTFLDLFLKLTIGMDLEMLSSKYPVVFIIILVYIILTFVLLNMLIALMGE 660
QY 721 TVGQVSKESKHIWKLQ 736
Db 661 TVGQVSKESKHIWKLQ 676

RESULT 4
US-09-235-451-25
; Sequence 25, Application US/09235451
; GENERAL INFORMATION:
; APPLICANT: Julius, David J.
; APPLICANT: Caterina, Michael J.
; TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING
; TITLE OF INVENTION: CAPSAICIN RECEPTOR AND CAPSAICIN RECEPTOR-RELATED
; FILE REFERENCE: 9076/084CIP
; CURRENT APPLICATION NUMBER: US/09/235,451
; PRIOR FILING DATE: 1999-01-22
; PRIOR FILING DATE: 1999-01-22
; PRIOR FILING DATE: 1998-01-22
; PRIOR FILING DATE: 1997-08-20
; NUMBER OF SEQ ID NOS: 48
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 25
; LENGTH: 843
; TYPE: PRT
; ORGANISM: chicken
US-09-235-451-25

Query Match 41.6%; Score 1604.5; DB 2; Length 843;
Best Local Similarity 47.5%; Pred No. 1.5e-143;
Matches 343; Conservative 128; Mismatches 184; Indels 67; Gaps 18;

QY 41 EGDGSLSPSPADASRPAAGDGRPNLRMKFQAGFRKGVNPNIDLLLESTLY--ESSWVFG 98
Db 27 DGEDSAL--ETAD-----NLQGT-----SNKVPQSPKSNIFARRGRFVWG 64
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QY 99 ---PKKAMPDMSLFDY-----CTYRHSSDNKRWKRIIEKQP---QSPKAPAPOPPPIL 146
Db 65 DCDKDWAPNDSPYQMDHLWAPSVIKFANMERGKHLKLLSTSDTSITCSEKA-----F 116
QY 147 KVFNPRLPDIIVSRGSTADLDGLLPFLTHKKRLTDEEPREPSTGKTCPLKALLNLSNGR 206
Db 117 KEYDRRRIPDAVARGSTKOLDLLLYLNRLLKHLTDDDEKPEPETGKTCLLKAMLAHLDGK 176
QY 207 NDTIPVLLDIAERTGNMREFINPFRDIYRGQTALHIAIERCKKHVELLVAGADVHA 266
Db 177 NDTIPVLLDIAERTGNMREFINPFRDIYRGQTALHIAIERCKKHVELLVAGADVHA 236
QY 267 QARGFFQFQ-KDEGGYFYFGLPLSLAACTNQHPIVNYLTENPHKADMRQDSRGNTVYL 325
Db 237 RACGFFRKLKQPG-FYFGLPLSLAACTNQLCIVKFLLENFYQADIAEDSMGNWVL 295
QY 326 HALVAIAADNTRENTKFTVMYDLDLLKCARLPDPSNLEAVLNNDGLSLPMAAATGKIGI 385
Db 296 HTLVEIADNTKONTKFTVMYNNILILGAKINPILKLELTNKKGLTPLTAAKTGKIGI 355
QY 386 FOHIIRREVTDETRHLSRKFQDMWAYGVPVSSLYDLSLDTGCEASVLEILVYNSKIEN 445
Db 356 FAYILIRRETKDPECHLSRKFTEWAYGVPVHSSLYDLSLDTGCEASVLEIAYSETPN 414
QY 446 RHEMLAVEPINELLRDKWRKFGAVSFYINNVSYLCAMVIFLTAYQPLE--GTTPPY- 502
Db 415 RHEMLAVEPINELLRDKWRKFGAVSFYINNVSYLCAMVIFLTAYQPLE--GTTPPY- 474
QY 503 RTVDYLRRLAGEVITLFTGVLFPTNFKDLFMKKCPGVNSLFDGSQLLYFYISVLVIV 562
Db 475 HSTGEYFRVTGSEILSVGLGYFFRGIQ-YFQVRPSLKTIVDSYSEVLFFVHSLULLS 533
QY 563 SAALYLAGIEAYLAVMVFALVGMWNLALYFTRGLKLTGYSIMIQKLFKDLFRFLYLL 622
Db 534 SVLVYFCGQELVAVMVFALVGMWNLALYFTRGQMGYISVMIAKMLRDLRCRFPVYL 593
QY 623 LEWIGYASALVSLNPNCKMVKCNEDQ-TNCTVTPYPCRDSETFT-----FLDLF 674
Db 594 VFELGFSTAVTLIED-----DNEGQDNSS--EYARCSHTRGRTSYNSLYTCLFLF 645
QY 675 KLTIGMDLEMLSSKYPVVFIIILVYIILTFVLLNMLIALMGETVQGVSKESKHIW 734
Db 646 KFTIGMDLEFTEYVRFKSVFVILVYLVILVILLVILLNMLIALMGETVSKIAESKSIW 705
QY 735 LQ 736
Db 706 LQ 707

RESULT 5
US-09-978-303-25
; Sequence 25, Application US/09978303
; Patent No. 6790629
; GENERAL INFORMATION:
; APPLICANT: Julius, David J.
; APPLICANT: Caterina, Michael J.
; APPLICANT: Brake, Anthony J.
; TITLE OF INVENTION: Nucleic acid sequences encoding
; TITLE OF INVENTION: capsaicin receptor and capsaicin receptor-related
; FILE REFERENCE: UCAL084CON
; CURRENT APPLICATION NUMBER: US/09/978,303
; CURRENT FILING DATE: 2001-10-15
; PRIOR APPLICATION NUMBER: 09/235,451
; PRIOR FILING DATE: 1999-01-22
; PRIOR APPLICATION NUMBER: 60/072,151
; PRIOR FILING DATE: 1998-01-22
; PRIOR APPLICATION NUMBER: 08/915,461
; PRIOR FILING DATE: 1997-08-20
; NUMBER OF SEQ ID NOS: 48
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 25
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; Sequence 3, Application US/09132316B  
; Patent No. 6444440  
; GENERAL INFORMATION:  
; APPLICANT: Young, Paul E.  
; APPLICANT: Ruben, Steven M.  
; TITLE OF INVENTION: Vanilloid Receptor-2  
; FILE REFERENCE: 1488.1110000  
; CURRENT APPLICATION NUMBER: US/09/132,316B  
; EARLIER FILING DATE: 1998-08-11  
; EARLIER APPLICATION NUMBER: US 60/040,163  
; EARLIER FILING DATE: 1997-03-07  
; EARLIER APPLICATION NUMBER: PCT/US98/04493  
; EARLIER FILING DATE: 1998-03-06  
; NUMBER OF SEQ ID NOS: 67  
; SOFTWARE: Patentin Ver. 2.0  
; SEQ ID NO 3  
; LENGTH: 838  
; TYPE: PRT  
; ORGANISM: Rattus norvegicus  
US-09-132-316-3

Query Match 40.9%; Score 1579.5; DB 2; Length 838;  
Best Local Similarity 44.6%; Pred. No. 3.6e-141;  
Matches 338; Conservative 129; Mismatches 193; Indels 97; Gaps 16;  
QY 16 AELPGDESGTGC-----APPLSSLANLPEGEDGSLSPSPADA 54  
DB 5 ASLDESESPQENSCLDPPDPNCKPPVPKPHFTTTRSRTRLF-GKGDSEASPLDC 63  
QY 55 SRPAGDGRPNLRMKFQAGFRKGVN-PIDLESTLYESSVVPKPKAMDLSFDYGY 113  
DB 64 PYEEG-----GLASCPITVSSVL-----TIQRPGDGP-----ASV 94  
QY 114 RHSSDNKRWKKIIEKQPSKAPAPQPPPIKLVNRPILFDIVSRGSTADLDGLLPFL 173  
DB 95 RPSSQDS-----VSAGEKP--RLYDRRSIFDAVAQSCQELSLPFL 136  
QY 174 LTHKKRLTDEEPSTGKTCPLKALLNLSNGRNDTIPVLLDIAERTGNMREFINSPPRD 233  
DB 137 QRSKKRLTSEFPDGTGKTCCLKAMLNHNGQNDTIALLDVARKTDSLKQFVNASYD 196  
QY 234 IYRGQTAHLIAIERCKHYVELLVAQADVAQARGFQPKDEGGYFYGELPLSLAA 293  
DB 197 SYTKGQTAHLIAIERNNMTLVLLVNGADVQAANGDFFKTKGRPGFYFGLPLSLAA 256  
QY 294 CTNQPHIVNLTENPHKKADMRQDSRGNTVLHALVAIADNTRENTKFTVMYDILLKLC 353  
DB 257 CTNQLAIVKLLQNSQPADISARDSVGNVTVLHALVEADNTVDNTKFTVSMYNEILLG 316  
QY 354 ARLPDSNLEAVLNNDGLSPMLMAAKTGKIGIFQHIIRREVTDEDTRHLSRKFQWAYGP 413  
DB 317 AKLHPTLKLEETNRKGLTPALAASSGKIGVLAYILOREIHEPECRHLSRKFTWAYGP 376  
QY 414 VYSSLYDLSLDTGCEASVLEILVY-NSKIENRHEMLAVEPINELLRDKWRKFGVSVY 472  
DB 377 VHSLLYDLSCIDTC-EKNSVLEIVAYSSSTPNRHDMLLVEPLNRLQDKWDFVKRIFY 435  
QY 473 INVVSYLCAWITFTLTAIYQPLEGTPPYRTTV-DYLRAGEVITLFTGVLFFFTNIKD 531  
DB 436 FNEFVCLYMIITAAAYRPVGLPPYKUNTVGYDFRVIGSILSVSGGVYFFFGIQ- 494  
QY 532 LFMKCPGVNSLFDGSQLLYFIYSVLIVSVAALVLAGIAYLAVMVFLVGMNVALY 591  
DB 495 YFLQRRPSKLSLFDVSYSEILFFQSLFMLVSVVLVFSQKEYVASVFLSANGWTNMLY 554  
QY 592 FTGKLKLTGYTSMIOKILFDLFRLLVLLFMIGVASALVSLNPNCAKMKVCEQDN 651  
DB 555 YTRGFOQMGIVYAWIEKMLRDLCREMFVYVLFVLFQFSTAVVTLI-----EDGKN 604  
QY 652 CTVP---TYBSCRDS-----ETFTSLDLEFKLTIGMGDLEMLSTKYPVVFILL 699  
DB 605 NSLPMESTPHKRGSAKPGNSYNSLYST-CLSELFKFTIGMGDLEFTENYDFKAVFIILL 663

QY 700 VTYIITLVLLNMLIALMGETVGVSKESKHWKLO 736  
DB 664 LAYVILTYILLNMLIALMGETVKNIAQESKNIWKLO 700  
RESULT 8  
US-09-667-422-9  
; Sequence 9, Application US/09667422  
; Patent No. 6482611  
; GENERAL INFORMATION:  
; APPLICANT: Cortright, Daniel  
; APPLICANT: Krause, James  
; TITLE OF INVENTION: Human Capsaicin Receptor and Uses Thereof  
; FILE REFERENCE: HCR  
; CURRENT APPLICATION NUMBER: US/09/667,422  
; CURRENT FILING DATE: 2001-06-07  
; NUMBER OF SEQ ID NOS: 13  
; SOFTWARE: Patentin Ver. 2.0  
; SEQ ID NO 9  
; LENGTH: 838  
; TYPE: PRT  
; ORGANISM: Rattus sp.  
; PUBLICATION INFORMATION:  
; AUTHORS: Caterina, Michael J.  
; AUTHORS: Schumacher, Mark A.  
; AUTHORS: Tomimaga, Makoto  
; AUTHORS: Rosen, Tobias A.  
; TITLE: The capsaicin receptor: a heat-activated ion channel in  
; JOURNAL: Nature  
; VOLUME: 389  
; PAGES: 816-824  
; DATE: 1997  
US-09-667-422-9

Query Match 40.9%; Score 1579.5; DB 2; Length 838;  
Best Local Similarity 44.6%; Pred. No. 3.6e-141;  
Matches 338; Conservative 129; Mismatches 193; Indels 97; Gaps 16;  
QY 16 AELPGDESGTGC-----APPLSSLANLPEGEDGSLSPSPADA 54  
DB 5 ASLDESESPQENSCLDPPDPNCKPPVPKPHFTTTRSRTRLF-GKGDSEASPLDC 63  
QY 55 SRPAGDGRPNLRMKFQAGFRKGVN-PIDLESTLYESSVVPKPKAMDLSFDYGY 113  
DB 64 PYEEG-----GLASCPITVSSVL-----TIQRPGDGP-----ASV 94  
QY 114 RHSSDNKRWKKIIEKQPSKAPAPQPPPIKLVNRPILFDIVSRGSTADLDGLLPFL 173  
DB 95 RPSSQDS-----VSAGEKP--RLYDRRSIFDAVAQSCQELSLPFL 136  
QY 174 LTHKKRLTDEEPSTGKTCPLKALLNLSNGRNDTIPVLLDIAERTGNMREFINSPPRD 233  
DB 137 QRSKKRLTSEFPDGTGKTCCLKAMLNHNGQNDTIALLDVARKTDSLKQFVNASYD 196  
QY 234 IYRGQTAHLIAIERCKHYVELLVAQADVAQARGFQPKDEGGYFYGELPLSLAA 293  
DB 197 SYTKGQTAHLIAIERNNMTLVLLVNGADVQAANGDFFKTKGRPGFYFGLPLSLAA 256  
QY 294 CTNQPHIVNLTENPHKKADMRQDSRGNTVLHALVAIADNTRENTKFTVMYDILLKLC 353  
DB 257 CTNQLAIVKLLQNSQPADISARDSVGNVTVLHALVEADNTVDNTKFTVSMYNEILLG 316  
QY 354 ARLPDSNLEAVLNNDGLSPMLMAAKTGKIGIFQHIIRREVTDEDTRHLSRKFQWAYGP 413  
DB 317 AKLHPTLKLEETNRKGLTPALAASSGKIGVLAYILOREIHEPECRHLSRKFTWAYGP 376  
QY 414 VYSSLYDLSLDTGCEASVLEILVY-NSKIENRHEMLAVEPINELLRDKWRKFGVSVY 472  
DB 377 VHSLLYDLSCIDTC-EKNSVLEIVAYSSSTPNRHDMLLVEPLNRLQDKWDFVKRIFY 435  
QY 473 INVVSYLCAWITFTLTAIYQPLEGTPPYRTTV-DYLRAGEVITLFTGVLFFFTNIKD 531

Db 436 FNFVCLYMIITFAAAYRPEGLPPYKLNVTGDFRVTGSEILSVSGVFFFRGIG- 494  
QY 532 LFMKPCGVNSLFDGSGFOLLYIYVSVLIVSAALYLAGIEAYLAVWVAFALVGLWNNALY 591  
Db 495 YFLORPSLSLFDVSYSEILFFVQSLFMLVSVVLYFSQKEVYASNVFSLANGWNNMLY 554  
QY 592 FTRGLKLTGTYSIMIKILFKDLFRLLVYLLFMIGYASALVSLNPNCAVMKVCNEDQTN 651  
Db 555 YTRGFQMGIVAMIEKMLRDLRPFVFLVFLFGFSTAVVTLI-----EDGKN 604  
QY 652 CTVP---TYPSCRDS-----ETFSFLDLFKLTIGMDLEMLSTKYPVVFPIILL 699  
Db 605 NSLMESTPHKCRGSACKPGNSVNSYST-CLFLFKFTIGMDLEFTENYDFKAVFIILL 663  
QY 700 VTYIILTFVLLNMLIALMGETVGVSKESHKWLQ 736  
Db 664 LAYVILTYILLNMLIALMGETVKNIAQESKNIKWLQ 700

RESULT 9  
US-09-978-303-2  
; Sequence 2, Application US/09978303  
; Patent No. 6790629  
; GENERAL INFORMATION:  
; APPLICANT: Julius, David J.  
; APPLICANT: Caterina, Michael J.  
; APPLICANT: Brake, Anthony J.  
; TITLE OF INVENTION: Nucleic acid sequences encoding  
; TITLE OF INVENTION: capsaisin receptor and capsaisin receptor-related  
; TITLE OF INVENTION: polypeptides and uses thereof  
; FILE REFERENCE: UCAL084CON  
; CURRENT APPLICATION NUMBER: US/09/978,303  
; PRIOR FILING DATE: 2001-10-15  
; PRIOR APPLICATION NUMBER: 09/235,451  
; PRIOR FILING DATE: 1999-01-22  
; PRIOR APPLICATION NUMBER: 60/072,151  
; PRIOR FILING DATE: 1998-01-22  
; PRIOR APPLICATION NUMBER: 08/915,461  
; PRIOR FILING DATE: 1997-08-20  
; NUMBER OF SEQ ID NOS: 48  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 2  
; LENGTH: 838  
; TYPE: PRT  
; ORGANISM: R. rattus  
US-09-978-303-2

Query Match 40.9%; Score 1579.5; DB 2; Length 838;  
Best Local Similarity 44.6%; Pred. No. 3.6e-141;  
Matches 338; Conservative 129; Mismatches 193; Indels 97; Gaps 16;

QY 16 AELPGDESCTPGGE-----APFLSSLANLPEGEDGSLSPSPADA 54  
Db 5 ASLDSESESPQENSCLDPPDRPNCKPPPVKPHIFTRSRTRLF-GKGDSESEASPLDC 63  
QY 55 SRPAGPDGRPNLRMKFQAFKGVN-PIDLLSTLYESSVVPKAPMDSLPDYGTY 113  
Db 64 PYEEG-----GLASCPITVSSVL-----TIQRPDGP-----ASV 94  
QY 114 RHSSDNKRWRKKIEKQPSKPAPQPPPIKLVFNRPILFDIVSRGSTADLDGLLPFL 173  
Db 95 RPSQDS-----VSAGEKPP--RLYDRSIFDAVAQSCQESLSPFL 136  
QY 174 LTHKKGLTDEPREPTGKTLCPKALLNLSNGRNDTIPVLLDIAERTGNMRFPNSPFRD 233  
Db 137 QRSKKGLTSEFPDPTGKTLCKLAMLNLHNGQNDTIALLDVARKTDSLKQFVNASYTD 196  
QY 234 IYVRGOTALHIAIERCKHVVELLVAGADVHAQARGFPQKDEGGYFVFCGLPLSLAA 293  
Db 197 SYKGGTALHIAIERRMVLTLLVENGADVQAANGDFKTKYGRPGYFGLPLSLAA 256  
QY 294 CTNQPHIVNYLTENPHKCADMRQDSRGNTVTLHALVAIADNTRENTKFTVKMYDLLLLKC 353

Db 257 CTNQLAIVKFLQNSQWQPADISARDSVGNVTVLHALVEADNTVNTKFTVSMYNEILILG 316  
QY 354 ARLFPDSNLNGLNDGLSPLMAAKTKIGIFQHIIRREVTDEDTLHLSRKFKDWAYCP 413  
Db 317 AKLHPTLKEEITNRKGLTPLALAASSKIGVLAYILOREIHEPECRHLRSKFTEMAYGP 376  
QY 414 VYSSLYDLSSLDTCGEASVLEILVY-NSKIENRHEMLAVEPINELLRDKWRKFGAVSFY 472  
Db 377 VHSSLYDLSCIDTC-EKNSVLEVIAYSSSEPNRHDMLLVEPLNLLQDKWDRFVKRIFY 435  
QY 473 INVSYLCMWITFTTAYIQPLEGTPPYRYRTTV-DYLRLAGEVITLTGVLFFPTNID 531  
Db 436 FNFVCLYMIITFAAAYRPEGLPPYKLNVTGDFRVTGSEILSVSGVFFFRGIG- 494  
QY 532 LFMKPCGVNSLFDGSGFOLLYIYVSVLIVSAALYLAGIEAYLAVWVAFALVGLWNNALY 591  
Db 495 YFLORPSLSLFDVSYSEILFFVQSLFMLVSVVLYFSQKEVYASNVFSLANGWNNMLY 554  
QY 592 FTRGLKLTGTYSIMIKILFKDLFRLLVYLLFMIGYASALVSLNPNCAVMKVCNEDQTN 651  
Db 555 YTRGFQMGIVAMIEKMLRDLRPFVFLVFLFGFSTAVVTLI-----EDGKN 604  
QY 652 CTVP---TYPSCRDS-----ETFSFLDLFKLTIGMDLEMLSTKYPVVFPIILL 699  
Db 605 NSLMESTPHKCRGSACKPGNSVNSYST-CLFLFKFTIGMDLEFTENYDFKAVFIILL 663  
QY 700 VTYIILTFVLLNMLIALMGETVGVSKESHKWLQ 736  
Db 664 LAYVILTYILLNMLIALMGETVKNIAQESKNIKWLQ 700

RESULT 10  
US-10-246-435-9  
; Sequence 9, Application US/10246435  
; Patent No. 6867009  
; GENERAL INFORMATION:  
; APPLICANT: Cortright, Daniel  
; APPLICANT: Krause, James  
; TITLE OF INVENTION: Human Capsaicin Receptor and Uses Thereof  
; FILE REFERENCE: HCR  
; CURRENT APPLICATION NUMBER: US/10/246,435  
; PRIOR FILING DATE: 2002-09-18  
; PRIOR APPLICATION NUMBER: US/09/667,422  
; PRIOR FILING DATE: 2001-06-07  
; NUMBER OF SEQ ID NOS: 13  
; SOFTWARE: Patentin Ver. 2.0  
; SEQ ID NO 9  
; LENGTH: 838  
; TYPE: PRT  
; ORGANISM: Rattus sp.  
; PUBLICATION INFORMATION:  
; AUTHORS: Caterina, Michael J.  
; AUTHORS: Schumacher, Mark A.  
; AUTHORS: Tominaga, Makoto  
; AUTHORS: Rosen, Tobias A.  
; TITLE: The capsaicin receptor: a heat-activated ion channel in  
; TITLE: the pain pathway  
; JOURNAL: Nature  
; VOLUME: 389  
; PAGES: 816-824  
; DATE: 1997  
US-10-246-435-9

Query Match 40.9%; Score 1579.5; DB 2; Length 838;  
Best Local Similarity 44.6%; Pred. No. 3.6e-141;  
Matches 338; Conservative 129; Mismatches 193; Indels 97; Gaps 16;

QY 16 AELPGDESCTPGGE-----APFLSSLANLPEGEDGSLSPSPADA 54  
Db 5 ASLDSESESPQENSCLDPPDRPNCKPPPVKPHIFTRSRTRLF-GKGDSESEASPLDC 63  
QY 55 SRPAGPDGRPNLRMKFQAFKGVN-PIDLLSTLYESSVVPKAPMDSLPDYGTY 113



Db 64 PYEEG-----GLASCPITVSSVL-----TIQRPDGP-----ASV 94  
Qy 114 RHSSDNKRWKRIIEKQSPKAPAPQPPPIKLVNRPILFDIVSRGSTADLDGLLPL 173  
Db 95 RPSQDS-----VSAGEKPP--RLYDRRSIPDAVAQSCQELSLLPL 136  
Qy 174 LTHKRLTDEEPREPSTGKTCLPKALLNSGRNDTIPVLLDIAERTGNMREFINSPPRD 233  
Db 137 QRSKRLTDSFKDPTGKTCLLKAMLNHNGQNTIALLDVARKTDSLKQFVNASYTD 196  
Qy 234 IYRGQTAHIAIERRCKHYVELLVAQAGADVHAQARGFFQPKDEGGYFYFGELPLSLAA 293  
Db 197 SYKGTQTAHIAIERENMTLVTLVENGADVQAANGDFFKTKRPGFYFGELPLSLAA 256  
Qy 294 CTNQHPIVNYLTENPHKKADMRQDSRGNTVHALVAIADNTRENTKFTVKMYDLLLLKC 353  
Db 257 CTNQLAIVKFLQNSQPADISARDSVGNVTVHALVEVADNTVNTKFTVSYNEILLG 316  
Qy 354 ARLPDSNLEAVLNNDGLSPLMAAATGKIGIFOHIIIRREVDEDETRHLSRKFKDWAYGP 413  
Db 317 AKLHPTLKLEETNRKGLTPLAALASSGKIGVLAYLQREIHEPCRHLSRKFTWAYGP 376  
Qy 414 VYSSLYDLSSDTCGEASVLEILVY--NSKIENRHEMLAVEPINELLRDKWRKFGAVSFY 472  
Db 377 VHSSLYDLSCIDTC--EKNSVLEVIAYSSSETPNRHDMLLVEPLNLLQDKWDRFVKRIFY 435  
Qy 473 INVSVLCAMVFTLTATYQOPEGTDPYRTTV--DYLRLAGEVITLFTGVLFFFTNIKD 531  
Db 436 FNFVYCYLMIIFTAAAYRPPVEGLPYKLNKTVDGYFRVTGEILSVSGGVYFFFRGQI- 494  
Qy 532 LPMKCPGVNSLFDIGSFOLLYFIYSVLVISAALVLAGIAYLAVMVPALVGLWMNLY 591  
Db 495 YLQRRPSLKSUFVDSYSEILFFVQSLFVLVSVLYFSORKEYVASMVPSLANGWTNMLY 554  
Qy 592 FTRGLKLTGYSIMTKILFKDLFRLLVYLLFMIGYASALVSLNMPCANMKVCNEDQTN 651  
Db 555 YTRGFQOMGIYAVMIEKMLRDLCRFMFVYLVFLFGFSTAVTLLI-----EDGKN 604  
Qy 652 CTVP---TYPSCRDS-----ETPSTFLDLPLKLTIGMGDLEMLSTKVPVFIILL 699  
Db 605 NSLPMESTPHKCRGSACKPGNSVNSLYST--CLELFKFTIGMGDLEFTENYDFKAVFIILL 663  
Qy 700 VTYIILTFVLLNMLIALMGETVGVSKESKHIWKLO 736  
Db 664 LAYVILTYILLNMLIALMGETVKNIAQESKNIWKLO 700

## RESULT 11

US-10-137-316-3  
; Sequence 3, Application US/10137316  
; Patent No. 6906178  
; GENERAL INFORMATION:  
; APPLICANT: Young, Paul E.  
; APPLICANT: Ruben, Steven M.  
; TITLE OF INVENTION: Vanilloid Receptor-2  
; FILE REFERENCE: 1488.1110002  
; CURRENT APPLICATION NUMBER: US/10/137,316  
; CURRENT FILING DATE: 2002-05-03  
; PRIOR APPLICATION NUMBER: US 09/132,316  
; PRIOR FILING DATE: 1998-08-11  
; NUMBER OF SEQ ID NOS: 67  
; SOFTWARE: PatentIn Ver. 3.1  
; SEQ ID NO 3  
; LENGTH: 838  
; TYPE: PRT  
; ORGANISM: Rattus norvegicus  
US-10-137-316-3

Query Match 40.9%; Score 1579.5; DB 2; Length 838;  
Best Local Similarity 44.6%; Pred. No. 3.6e-141;  
Matches 338; Conservative 129; Mismatches 193; Indels 97; Gaps 16;  
Qy 16 AELPGDESGTPGGE-----APPLSSLANLFEQDGLSPSPADA 54

Db 5 ASLSESESESPQENSCLDPDRDPNCKPVPKPHIFTRSRTRLF--KGDSSEASPLDC 63  
Qy 55 SRPAGPGDRPNLRMKFOGAFKGVN--PIDLESTLYESSVVGPKKAPMDSLFDYGTY 113  
Db 64 PYEEG-----GLASCPITVSSVL-----TIQRPDGP-----ASV 94  
Qy 114 RHSSDNKRWKRIIEKQSPKAPAPQPPPIKLVNRPILFDIVSRGSTADLDGLLPL 173  
Db 95 RPSQDS-----VSAGEKPP--RLYDRRSIPDAVAQSCQELSLLPL 136  
Qy 174 LTHKRLTDEEPREPSTGKTCLPKALLNSGRNDTIPVLLDIAERTGNMREFINSPPRD 233  
Db 137 QRSKRLTDSFKDPTGKTCLLKAMLNHNGQNTIALLDVARKTDSLKQFVNASYTD 196  
Qy 234 IYRGQTAHIAIERRCKHYVELLVAQAGADVHAQARGFFQPKDEGGYFYFGELPLSLAA 293  
Db 197 SYKGTQTAHIAIERENMTLVTLVENGADVQAANGDFFKTKRPGFYFGELPLSLAA 256  
Qy 294 CTNQHPIVNYLTENPHKKADMRQDSRGNTVHALVAIADNTRENTKFTVKMYDLLLLKC 353  
Db 257 CTNQLAIVKFLQNSQPADISARDSVGNVTVHALVEVADNTVNTKFTVSYNEILLG 316  
Qy 354 ARLPDSNLEAVLNNDGLSPLMAAATGKIGIFOHIIIRREVDEDETRHLSRKFKDWAYGP 413  
Db 317 AKLHPTLKLEETNRKGLTPLAALASSGKIGVLAYLQREIHEPCRHLSRKFTWAYGP 376  
Qy 414 VYSSLYDLSSDTCGEASVLEILVY--NSKIENRHEMLAVEPINELLRDKWRKFGAVSFY 472  
Db 377 VHSSLYDLSCIDTC--EKNSVLEVIAYSSSETPNRHDMLLVEPLNLLQDKWDRFVKRIFY 435  
Qy 473 INVSVLCAMVFTLTATYQOPEGTDPYRTTV--DYLRLAGEVITLFTGVLFFFTNIKD 531  
Db 436 FNFVYCYLMIIFTAAAYRPPVEGLPYKLNKTVDGYFRVTGEILSVSGGVYFFFRGQI- 494  
Qy 532 LPMKCPGVNSLFDIGSFOLLYFIYSVLVISAALVLAGIAYLAVMVPALVGLWMNLY 591  
Db 495 YLQRRPSLKSUFVDSYSEILFFVQSLFVLVSVLYFSORKEYVASMVPSLANGWTNMLY 554  
Qy 592 FTRGLKLTGYSIMTKILFKDLFRLLVYLLFMIGYASALVSLNMPCANMKVCNEDQTN 651  
Db 555 YTRGFQOMGIYAVMIEKMLRDLCRFMFVYLVFLFGFSTAVTLLI-----EDGKN 604  
Qy 652 CTVP---TYPSCRDS-----ETPSTFLDLPLKLTIGMGDLEMLSTKVPVFIILL 699  
Db 605 NSLPMESTPHKCRGSACKPGNSVNSLYST--CLELFKFTIGMGDLEFTENYDFKAVFIILL 663  
Qy 700 VTYIILTFVLLNMLIALMGETVGVSKESKHIWKLO 736  
Db 664 LAYVILTYILLNMLIALMGETVKNIAQESKNIWKLO 700

## RESULT 12

US-09-197-636-2  
; Sequence 2, Application US/09197636  
; Patent No. 6239267  
; GENERAL INFORMATION:  
; APPLICANT: DUCKWORTH, DAVID  
; APPLICANT: HAYES, PHILIP  
; APPLICANT: MEADOWS, HELEN  
; APPLICANT: DAVIS, JOHN  
; TITLE OF INVENTION: NOVEL COMPOUNDS  
; NUMBER OF SEQUENCES: 8  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Ratner & Prestia  
; STREET: P.O. Box 980  
; CITY: Valley Forge  
; STATE: PA  
; COUNTRY: US  
; ZIP: 19482-0980  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible

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/ OPERATING SYSTEM: DOS
/ SOFTWARE: FastSEQ for Windows Version 2.0
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/197,636
/ FILING DATE: 23-NOV-1998
/ CLASSIFICATION:
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: UK 9805137.8
/ FILING DATE: 12-MAR-1998
/ APPLICATION NUMBER: UK 9815791.0
/ FILING DATE: 21-JUL-1998
/ APPLICATION NUMBER: UK 9819278.4
/ FILING DATE: 03-SEP-1998
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Prestia, Paul F
/ REGISTRATION NUMBER: 23,031
/ REFERENCE/DOCKET NUMBER: GP-30075
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 601-407-0700
/ TELEFAX: 610-407-0701
/ TELEX: 846169
/ INFORMATION FOR SEQ ID NO: 2:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 839 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ US-09-197-636-2

Query Match 40.4%; Score 1557.5; DB 2; Length 839;
Best Local Similarity 44.5%; Pred. No. 4.5e-139;
Matches 321; Conservative 138; Mismatches 188; Indels 74; Gaps 12;

QY 49 PSPADASRAGCGDGRPNL-----RMKFG-----AFKGVNPIIDLES--TLYESSV 95
Db 22 PDPLDGNRPSPPAKPOLSTAKSRTRLFKGDSEAFVDCPHEBEGELDSCTTIVSPV 81
QY 96 V-----PGPKAPMDSLFDYGYRHHSSDNKRWKKIIEKQPSKAPAPQPPILKVF 149
Db 82 ITIQPGDGTGARL-----LSQDSVAASSTKTLRLY 113
QY 150 NRPLFDIVSRGSTADLGLLPFLTHKKRLTDEEPREPSTGKTCPLKALLNLSGRNDT 209
Db 114 DRSIFEVAQNQCQLLESLLFLQSKHLLTNEFKDPETGKTCLLKAMLNHGGQNTT 173
QY 210 IPVLLDIARTGNMREFINSPPRDIYRGQTALHIAIERCKHYVELLVAQADVAQAA 269
Db 174 IPLLBIARQTDLSKELVNASYTDSTYKGTALHIAIERNNMALVTLVENGADVQAAAH 233
QY 270 GRFFQPKDGGYFYFGEPLSLAACTNPHIVNYLTENPHKKADMRRQDSRGNTVLHALV 329
Db 234 GDFFKTKGRPGFYFGEPLSLAACTNQLGIYKFLQNSWQTADISARDSVGNVTVLHALV 293
QY 330 AIADNTRENTKFTVMYDILLKCARLPDPSNLEAVLNNDGLSPLMMAAKTGKIGIFOHI 389
Db 294 EVADNTADNTKFTVSMYNIILLGAKHLTKLELTNNKGMTPLALAGTGKIGVLAYI 353
QY 390 IREVVDETRHLSRKPKDMWAGPVVSYLDYSSLDTCGEASVLEILVY-NSKIENRHE 448
Db 354 LQREIQEPCRHLSRKFTFEWAYGPVHSSLYDLSCIDTC-EKNSVLEVIAYSSSTPNRHD 412
QY 449 MLAVEPINELLKDKWKKFAGVFIYINVSVLCAMVIFTLTAYYQPLEGTPPYPTTVDY 508
Db 413 MLLVEPLNELLQDKWDRFKRIFYFNFLVYCYLMIFTWAAAYRPPVDGLPPFMKMTGDY 472
QY 509 LRLAGEVITLFTGLVLPFFFTNIDKFMKCPGVNSLFDIGSFOLLFIYISVLVISAALYL 568
Db 473 FRVTGILSVLGGVYFFFGIQ-YFLQRRPSKMTLFVDSYSEMLFQSLFMLATVVLVY 531
QY 569 AGIEAYLAVMWVFLVIGWNNALYFTTGLKLTGTYSIMIQILFKDLFRLLVYLLFMIGY 628
Db 532 SHLKEYVASMVFLSALGWTNMLYITRFGQMGIIYAVNIEKMILRDLICRPFMVFYIVFLFGF 591
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QY 629 ASALVSLNPCANMKVCNEDOTNCTVPTY-----PSCRDSE-----ESTFLDLFK 675
Db 592 STAVVTLI-----EDGNLSLSESTSHRWGPGACPPDSSYNSLYST-CLELFK 640
QY 676 LTIGMGDLEMSSTKYVPVFIILVYIILTFVLLNMLIALMGETVGVSKESKHIWKL 735
Db 641 FTIGMGDLEFTENYDFKAVFIILAYVILAYVILVILLNMLIALMGETVKNKIAESKNIWKL 700
QY 736 Q 736
Db 701 Q 701
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RESULT 13
US-09-197-636-8
/ Sequence 8, Application US/09197636
/ Patent No. 6239267
/ GENERAL INFORMATION:
/ APPLICANT: DUCKWORTH, DAVID
/ APPLICANT: HAYES, PHILIP
/ APPLICANT: MEADOWS, HELEN
/ APPLICANT: DAVIS, JOHN
/ TITLE OF INVENTION: NOVEL COMPOUNDS
/ NUMBER OF SEQUENCES: 8
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Ratner & Prestia
/ STREET: P.O. Box 980
/ CITY: Valley Forge
/ STATE: PA
/ COUNTRY: US
/ ZIP: 19482-0980
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Diskette
/ COMPUTER: IBM Compatible
/ OPERATING SYSTEM: DOS
/ SOFTWARE: FastSEQ for Windows Version 2.0
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/197,636
/ FILING DATE: 23-NOV-1998
/ CLASSIFICATION:
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: UK 9805137.8
/ FILING DATE: 12-MAR-1998
/ APPLICATION NUMBER: UK 9815791.0
/ FILING DATE: 21-JUL-1998
/ APPLICATION NUMBER: UK 9819278.4
/ FILING DATE: 03-SEP-1998
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Prestia, Paul F
/ REGISTRATION NUMBER: 23,031
/ REFERENCE/DOCKET NUMBER: GP-30075
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 601-407-0700
/ TELEFAX: 610-407-0701
/ TELEX: 846169
/ INFORMATION FOR SEQ ID NO: 8:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 839 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ US-09-197-636-8
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Query Match 40.3%; Score 1556.5; DB 2; Length 839;
Best Local Similarity 44.5%; Pred. No. 5.6e-139;
Matches 321; Conservative 138; Mismatches 188; Indels 74; Gaps 12;

QY 49 PSPADASRAGCGDGRPNL-----RMKFG-----AFKGVNPIIDLES--TLYESSV 95
Db 22 PDPLDGNRPSPPAKPOLSTAKSRTRLFKGDSEAFVDCPHEBEGELDSCTTIVSPV 81
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96 V-----PGPKKAPMDSLFYDGYTTRHHSSDNKRWRKKIIEKOPQSPKAPAPOPPPILKVPF 149
82 I TIORPGDGPGLARL-----LSQDSVAASTEXTLRLY 113
150 NRPTILEDIVSRGSTADLGLLPFLTLTHKKRLTDEEFRBPSGTCTCLPKALLNLSNGRNDT 209
114 DRSIFEAVAGNCCODLESLLFLFLOKSKHLFDNEFKOPETGKTCLLKAWMLNHGONTT 173
210 I PVLIIAERTGNMREFINSPPRDTYYRGQTALHIAIERRRCKHYVELLVAQADVHAQAQ 269
174 I PLLLEIARQTDLSKELVNASYDSYVYKQPTALHIAIERRNALVTLLVENGADVQAAH 233
270 GRFPQKDEGGYFFYFGEPLPLSLAACTNPHIYNYLTENPHKKADWRORDSRGNTVLHALV 329
234 GDFPKTKRGRCFYFGEPLPLSLAACTNOLGI VKFLLQNSQWTDATISARDSVGNVTVLHALV 293
330 AIADNTRNTKVTWKYDLLLLKCARLPDPSNLEAVLNNDGLSPLMMAAKTKGIGIFOHI 389
294 EVADNTADNTKFEVTSWYNEIILGAKLHPTLKEELTNKKGWTPALAAAGTKGIGLAYI 353
390 IRREVTDSDTRHLGRKFKDMWAYGPVYSSILYDLSLDTGCEEASVLEILVY-NSKTENRHE 448
354 LQREIQEPECRLHRSKKTFFWAYGPVHSSDYLDUSCIDTC-EKNSVLEIATVAYSSETPNRHD 412
449 MLAVEPINELLRDWRKFCGAVSYFINVVSYLCAWVIFTLTATYQPLEGTPPYPTVTDVY 508
413 MLLAVEPLNLLQDWDRFVKRIEYENFLVYCLYMIIFTMAAYYRPVDGLPFPFKMETG DY 472
509 LRLAGEVITLFTGVLFFFTNI KOLPMKKCPGVNSLFDIGSFOLLYFYISVLVIVSAAALY 568
473 FRVTGEILSVLGGVYVFFRGIQ-YFLQRRPSMKTLFVDSYSEMLFLOSLFMLATVLYF 531
569 AGIEAYLAVMVPALVLGHMNALYFTRGLKLTCTYSIMIQILFKDLFRPLLVTYLFPMIGY 628
532 SHLKEYVASWVFSALGWTNMLYYTRGFQOMGIYAVMIEKMTLRDLCRPMFYVYVFLFGF 591
629 ASALVSLINPCANMKVCNEDQNTCTVPTY-----PSCRDSER-----PSTELDLDPK 675
592 STAVVTLI-----EDGKNDLSLPESTSHRWGRGACRPDPDSYNSLYST-CLEULPK 640
676 LTIGWGDLEMLSSTKYPVVFVILLVYIILTFVLLNLMIALMGETVGVQSKESKHVKL 735
641 PTIGWGDLEFTENYDFKAVFIILLAYVILTYILLANMLIALMGETVKNIAQESKNWKI 700
736 Q 736
701 Q 701

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RESULT 14  
US-09-235-451-34  
Sequence 34, Application US/09235451  
GENERAL INFORMATION:  
APPLICANT: Julius, David J.  
APPLICANT: Caterina, Michael J.  
APPLICANT: Brake, Anthony J.  
TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING  
TITLE OF INVENTION: CAPSAICIN RECEPTOR AND CAPSAICIN RECEPTOR-RELATED  
TITLE OF INVENTION: POLYPEPTIDES AND USES THEREOF  
FILE REFERENCE: 9076/084CIP  
CURRENT APPLICATION NUMBER: US/09/235,451  
CURRENT FILING DATE: 1999-01-22  
PRIOR APPLICATION NUMBER: 60/072,151  
PRIOR FILING DATE: 1998-01-22  
PRIOR APPLICATION NUMBER: 08/915,461  
PRIOR FILING DATE: 1997-08-20  
NUMBER OF SEQ ID NOS: 48  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 34  
LENGTH: 839  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-235-451-34

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Query Match          40.3%; Score 1556.5; DB 2; Length 839;
Best Local Similarity 44.5%; Pred. No. 5.6e-139;
Matches 321; Conservative 138; Mismatches 188; Indels 74; Gaps 12;

QY      49  PSPADASRPAGCGDGRNL-----RMKFG-----AFKGVNPIDLLS--TLVESSV 95
DB      22  PDPLDGDNSRPPAPKQQLSTAKSRTRLFKGDSEAFVVDCHHEGELDSCTIIVSPV 81
QY      96  V-----PGCKAPMDSLFYGYTRYHSSDNKWRKKIKKQPSKPAPQPPPIKLVF 149
DB      82  ITIQRPGDGTGARL-----LSQDSVAASTEKTLRLY 113
QY      150  NRPILEDIVSRGSTADLDGLLPILLTHKKELTDEEPEPSTGKTCLPKALINLSNGENDT 209
DB      114  DRSIFEAVAQNCCQLESLLFLQSKKHLTDNEFKOPETGKTCLLKAMNLHDGQNTT 173
QY      210  IPIVLLDIAERTGNMRBFINSPPFDIYVRGOTALHIAIERRCKHYVELLVLAQAGADVHAQAR 269
DB      174  IPIVLLIARCTDSLKELVNASYDTSYKGTALHIAIERRNMAVLTVLLVENGADVQAAAH 233
QY      270  GRFFQPKDEGGYFYFGEPLSLAACTNQPHI VNYLTENPHKKADMRDQSRGNTVTLHALV 329
DB      234  GDFFKTKTGRPGFYFGEPLSLAACTNQLGIVKFLQNSWQTDISARDSVGNVTVLHALV 293
QY      330  AIAADNTRENTKFTYKMDVLLLLKCARLPDSNLEAVLNNDGLSPLMAAKTGKIGIFOHI 389
DB      294  EVADNTADNTKFTYSMYNEILILGAKLHPTLKLEELTNKKGMTPLAALAGTGKIGVLAYI 353
QY      390  IRREVDEDETRHLSRKFQWAYGPVYSSLYDLSLDTCGEASVLEILVY-NSKIEHRHE 448
DB      354  LQREIQEPECEHLSRKFTEWAYGPVHSSLYDLSIDTC-EKNSVLEIVIASSETPNEHD 412
QY      449  MLAVEPINELLRDKWRKFGAVSYFINVSYLCAMVIFTLTAYYIOLEGTPPYPYRTTVDY 508
DB      413  MLLAVEPINLLQDKWRDFVKRIEYFNFVLYCLYMIIFTMAAYYRPVDGLPPFKMEKTGDY 472
QY      509  LRLAGEVITLFTGLVPEFTNIKDLFMKKCPGVNSLFDGSGFQLLYFIYSVLIVSAALYL 568
DB      473  FRVTGILSVLGVGYYFFFGIQ-YFIQRPSMTKTLFVDSYSEMLFFLQSLFUMFLAVVLYF 531
QY      569  AGIEAYLAVMVFALVLGVMNALYFTRGLKLTGYTYSIMIQILFKOLFRLFLVLLVFMIGY 628
DB      532  SHLKEYVASVFSALGWTNMLYTRGFQMGYIYAVMIKMLRLDLRCRFMFVYVFLFGF 591
QY      629  ASALVSLINPCANKVCNEDQTNCTVPTY-----PSCRDET-----FSTFLDLDFK 675
DB      592  STAVVTLLI-----EDGKNDSLPSSESTSHRWGPGACRPDPSSVNSLYST-CLELFX 640
QY      676  LTIQMGDLEMLSTKYPVVEPIILLVYIILLTVLLNMLIALMGETGVQVSKSKHIWKL 735
DB      641  FTIIMGDLEPTENYDFKAVPIIILLAYVITLYILLNMLIALMGETVKNIAQSSKNIWKL 700
QY      736  Q 736
DB      701  Q 701

RESULT 15
US-09-978-303-34
; Sequence 34, Application US/09978303
; Patent No. 6790629
; GENERAL INFORMATION:
; APPLICANT: Julius, David J.
; APPLICANT: Caterina, Michael J.
; APPLICANT: Brake, Anthony J.
; TITLE OF INVENTION: Nucleic acid sequences encoding
; TITLE OF INVENTION: capsaicin receptor and capsaicin receptor-related
; TITLE OF INVENTION: polypeptides and uses thereof
; FILE REFERENCE: UCAL084CON
; CURRENT APPLICATION NUMBER: US/09/978,303
; PRIOR FILING DATE: 2001-10-15
; PRIOR APPLICATION NUMBER: 09/235,451

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; PRIOR FILING DATE: 1999-01-22
; PRIOR APPLICATION NUMBER: 60/072,151
; PRIOR FILING DATE: 1998-01-22
; PRIOR APPLICATION NUMBER: 08/915,461
; PRIOR FILING DATE: 1997-08-20
; NUMBER OF SEQ ID NOS: 48
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 34
; LENGTH: 839
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-978-303-34

Query Match      40.3%; Score 1556.5; DB 2; Length 839;
Best Local Similarity 44.5%; Pred. No. 5 6e-139;
Matches 321; Conservative 138; Mismatches 188; Indels 74; Gaps 12;

QY 49 PSPADASRPAGDGRPNL-----RMKFOG-----AFKGVNPIIDLES--TLYESSV 95
Db 22 PDPLDGDPNRPPPAKPOLSTAKSRTRLFGKGDSEAFVDCPHEGELDSCTITVSPV 81
QY 96 V-----PGPKAPMSLDYGYTHHSSDNKRWKKIIEKQPSKAPAPQPPILKVF 149
Db 82 ITIQREGDGTGARL-----LSQDSVAASTEKTRLRY 113
QY 150 NRPILDIVSRGSTADLGLPPLTHKKRLTDEEPREPSTGKTCLPKALLNLNGRNDT 209
Db 114 DRSEIFEAVANNQCOLESLLFLQSKKHLTDNEFDPTGKTCCLKAWLNLDHGQNTT 173
QY 210 IPLLLEIARTDSKELVNASTYDSYKGTGTHALHAIERRNNMALVTLVAVENGADVQAAAH 233
Db 174 IPLLLEIARTDSKELVNASTYDSYKGTGTHALHAIERRNNMALVTLVAVENGADVQAAAH 233
QY 270 GRFFQPKDEGGYFYGELPLSLAACNQPHIVNYLTENPHKKADMRRQDSRGNTVLHALV 329
Db 234 GDFFKTKGRPGFYFGEPLSLAACNQPLGIVKFLQNSQWOTADISARDSVGNVTVLHALV 293
QY 330 ATADNTRENTKFTVMYDILLKLCARLPDSNLKLVNNDGLSPLMMAAKTKIGIFQHI 389
Db 294 EVADNTADNTKFTVSYNEILLGAKLHPTLKEELTNKKGMTPLALAAAGTKIGVLA 353
QY 390 IRREVTEDETRHLSRKFDWAYGPVYSSLYDLSLPTCGEEASVLEILVY-NSKIENRHE 448
Db 354 LQREIQEPCRHLSRKFTWAYGPVHSHSLYDLSCIDTC-EKNSVLEVIAYSSSETPNRHD 412
QY 449 MLAVEPINELLRDKWKFGAVSYINNVSYLCAMVJFTLTAYYQPLEGTPPYPTTYDY 508
Db 413 MLLVEPLNRLLOKNDRFVKRIFYFNFLVYCLYMIIFTMAAYYRPVDGLPFPKMBKTGY 472
QY 509 LRLAGEVITLFTGVLPFFFTNIKDLFMKCPGVNSLFDGSLYLYFYISVLVISAALYL 568
Db 473 FRVTGEILSVLGVYFFFGIQ-YFLQRRPSWKTLFVDSYSEMLFFLQSLFMLATVVL 531
QY 569 AGIEAYLAVMVFALVIGMNNALYFTGLKLTGTYSIMIQLKILFKDLFFLLVLLFMICY 628
Db 532 SHLKEYVASMVFSALGWTNMLYTYTRFGFQMGIIYAVWIEKMLIRDLCREMFVYVFLPGF 591
QY 629 ASALVSLNPNCAKMKVNCEDQNTCTVPTY-----PSCRSET-----FSTFLDLFPK 675
Db 592 STAVVTLI-----EDGKNDSLPSBSTSHRMRGPACRPPDSSYNSLYST-CLELFPK 640
QY 676 LTIGMGDLEMLSTKYPVVFIILLVYIILTFVLLNMLIALMGETVGVQVSKESKIHWKL 735
Db 641 FTIGMGDLEFTENYDPKAVFIILLAYVILTVILLNMLIALMGETVKNKIQESKNIWKL 700
QY 736 Q 736
Db 701 Q 701
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Search completed: March 6, 2006, 14:44:36  
Job time : 51 secs